

## TENT COOPERATION TRE Y

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C.20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

<b>Date of mailing</b> (day/month/year) 01 May 2000 (01.05.00)	
<b>International application No.</b> PCT/US99/10854	<b>Applicant's or agent's file reference</b> CM2107F/JH
<b>International filing date</b> (day/month/year) 17 May 1999 (17.05.99)	<b>Priority date</b> (day/month/year) 30 September 1998 (30.09.98)
<b>Applicant</b> BUSCH, Alfred et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

16 March 2000 (16.03.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p>Authorized officer Pascal Piriou</p> <p>Telephone No.: (41-22) 338.83.38</p>
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## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>CM2107F/JH</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 99/ 10854</b>	International filing date (day/month/year) <b>17/05/1999</b>	(Earliest) Priority Date (day/month/year) <b>30/09/1998</b>
Applicant  <b>THE PROCTER &amp; GAMBLE COMPANY et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

**4. With regard to the title,**

the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

**LAUNDRY DETERGENT AND/OR FABRIC CARE COMPOSITIONS COMPRISING A CHEMICAL ENTITY, WHICH CONTAINS A DEPOSITION AID, AND A POLYMER**

**5. With regard to the abstract,**

the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

**6. The figure of the drawings to be published with the abstract is Figure No.**

as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.



None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

T/US 99/10854

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 C11D3/386 C12N9/42 C11D3/37

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C11D C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 97 24427 A (PROCTER &amp; GAMBLE COMPANY)            10 July 1997 (1997-07-10)            page 10, line 5 -page 11, paragraph 1            page 8, paragraph 1 -page 10, paragraph 2            page 2, paragraph 2            page 3, paragraph 5 -page 4, paragraph 1            page 5, paragraph 2 -page 6, line 32            page 12, paragraph 3            page 21, line 7 - line 10            page 26, paragraph 2 -page 27, paragraph 2            page 35, paragraph 2            page 36            page 32, line 17 - line 21</p> <p style="text-align: center;">---</p> <p style="text-align: center;">-/--</p>	1-10, 12, 13



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

15 September 1999

Date of mailing of the international search report

30/09/1999

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
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Authorized officer

Ketterer, M

## INTERNATIONAL SEARCH REPORT

International Application No

T/US 99/10854

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 98 00500 A (UNILEVER PLC) 8 January 1998 (1998-01-08) cited in the application page 4, line 9 - line 28 page 6, line 7 - line 26 page 5, line 4 - line 12 page 7, line 22 - line 29 page 8, line 6 - line 18 claim 17 ---	1-5, 10, 13
A	WO 96 13524 A (YEDA RES & DEV ; UNIV RAMOT (IL); TECHNION RES & DEV FOUNDATION (IL) 9 May 1996 (1996-05-09) claims 1-3, 10, 14 ---	1-3
A	EP 0 319 957 A (GLUETECH APS) 14 June 1989 (1989-06-14) claims 1, 15, 19 ---	1, 2, 7
A	DE 21 09 881 A (KONINKLIJKE GIST SPIRITUS) 23 September 1971 (1971-09-23) claims ---	1, 11-13
A	WO 93 22417 A (UNILEVER PLC ; UNILEVER NV (NL)) 11 November 1993 (1993-11-11) page 22, line 19 - line 29 claims -----	1, 11-13

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

T/US 99/10854

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 9724427	A	10-07-1997	AU	4744996 A	28-07-1997
			BR	9510680 A	30-03-1999
			EP	0877787 A	18-11-1998
			JP	11502256 T	23-02-1999
WO 9800500	A	08-01-1998	AU	3438197 A	21-01-1998
WO 9613524	A	09-05-1996	AU	4011495 A	23-05-1996
EP 0319957	A	14-06-1989	DK	641487 A	08-06-1989
			AT	97680 T	15-12-1993
			CA	1335804 A	06-06-1995
			DE	3885908 D	05-01-1994
			DE	3885908 T	24-03-1994
			DK	138190 A, B,	06-06-1990
			WO	8905329 A	15-06-1989
			EP	0390841 A	10-10-1990
			JP	3502938 T	04-07-1991
			US	5427779 A	27-06-1995
DE 2109881	A	23-09-1971	AT	318523 B	25-10-1974
			AT	344299 B	10-07-1978
			AT	508672 A	15-11-1977
			BE	763681 A	02-09-1971
			CA	987613 A	20-04-1976
			CH	572494 A	13-02-1976
			DK	131472 B	21-07-1975
			DK	135325 B	04-04-1977
			ES	388808 A	01-03-1974
			FR	2084033 A	17-12-1971
			GB	1353317 A	15-05-1974
			IE	34979 B	15-10-1975
			LU	62698 A	20-08-1971
			NL	7102726 A	07-09-1971
			NL	7313980 A, B	27-12-1973
			PH	10749 A	01-09-1977
			RO	58839 A	15-09-1975
			SE	397194 B	24-10-1977
			TR	16938 A	01-11-1973
			ZA	7101357 A	28-06-1972
WO 9322417	A	11-11-1993	US	5281357 A	25-01-1994
			AU	4261393 A	29-11-1993
			DE	69303293 D	25-07-1996
			DE	69303293 T	21-11-1996
			EP	0672102 A	20-09-1995
			ES	2091001 T	16-10-1996
			JP	7506137 T	06-07-1995
			US	5281355 A	25-01-1994
			US	5385959 A	31-01-1995
			ZA	9303026 A	29-10-1994

## PATENT COOPERATION TREATY

## PCT

REC'D 30 NOV 2000

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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

15

Applicant's or agent's file reference CM2107F/JH	<b>FOR FURTHER ACTION</b>	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/US99/10854	International filing date (day/month/year) 17/05/1999	Priority date (day/month/year) 30/09/1998
International Patent Classification (IPC) or national classification and IPC C11D3/386		
Applicant THE PROCTER & GAMBLE COMPANY et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 5 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  16/03/2000	Date of completion of this report  28.11.2000
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Culmann, J-C  Telephone No. +49 89 2399 8487  

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/10854

## I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).):*

**Description, pages:**

1-84 as originally filed

**Claims, No.:**

1-13 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/10854

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Yes:	Claims	7
	No:	Claims	1-6,8-13
Inventive step (IS)	Yes:	Claims	
	No:	Claims	7
Industrial applicability (IA)	Yes:	Claims	1-13
	No:	Claims	

### 2. Citations and explanations **see separate sheet**

## VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:  
**see separate sheet**



**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability**

1. Document D1 (WO 97/24427) describes compositions (see Examples 2, 3, 5 and 6) comprising an immobilized enzyme (see Example 1, an endoglucanase - obviously from the strain *Humicola insolens*, see D1 on page 5 - reacted with PEG of Mw 5,000 which is a soil release agent according to the description of the present application see on page 28) and various polymers (ethoxylated surfactants, MA/AA, CMC, copolymers of vinylimidazole and vinylpyrrolidone, HMWPEO, PVP, PGMS).

The subject-matter of claims 1 to 6 and 8 to 13 lacks novelty in the sense of Article 33(2) PCT.

2. Document D2 (DE-A-21 09 881) describes compositions comprising the reaction product of (i) an enzyme from the strain *Bacillus subtilis* with (ii) a copolymer of maleic acid and styrene and (iii) a fatty acid ammonium salt derivative (Hyamin 1622), admixed with (see the table on page 18 of D2) CMC and a polymeric surfactant.

The subject-matter of claims 1, 2, 4 to 6, and 8 to 13 lacks novelty in the sense of Article 33(2) PCT.

3. Document D3 (WO 98/00500) relates to chemical entities as defined in the present application, comprising a deposition aid having a high affinity for fibres and attached/absorbed to a benefit agent (see claim 1 of D3). In fully formulated detergent composition, further polymers like antiredeposition agents (e.g. cellulosic polymers), soil release agents, decoupling polymers (see D3 on page 15) may be introduced.

- 3.1. It may be noted that all the details provided by the Applicant in his application about the "chemical entity" may be retrieved from this citation.

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/US99/10854

- 3.2. The subject-matter of the present application differs from this citation only in that a polymer must be present.
- 3.3. The Applicant further alleges of a synergetical effect between said "chemical entity" and said polymer and provides a theory therefor.
- 3.4. That synergy is not supported by evidence.
- 3.5. The theory is merely a plausible explanation of this not supported allegation and represents a technical information which on its own cannot be patentable.
- 3.6. The subject-matter of claim 7 represents nothing more than a description of a linking polymer, possibly differing from those suggested in D3, but which are nevertheless commercially available, and which selection does not (since there is no support therefor) the presence of any inventive contribution over the linking polymers suggested in D3; thus said subject-matter cannot amount to an inventive step in the sense of Article 33(3) PCT.

**VII. Certain defects in the international application.**

Some citations are not identified by their publication number (see on pages 9, 10, 23, 57, 63, 64, 65, 66, 68, 70, 72, 73, 74, 75, 78).

The requirements of Rule 5.1 a) ii) PCT are not met, the documents D1 to D3 are not identified in the description and the relevant background art disclosed therein is not briefly discussed.



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>7</sup> :</b> <b>C11D 3/386, C12N 9/42, C11D 3/37</b>	<b>A1</b>	<b>(11) International Publication Number:</b> <b>WO 00/18865</b> <b>(43) International Publication Date:</b> 6 April 2000 (06.04.00)
<b>(21) International Application Number:</b> PCT/US99/10854 <b>(22) International Filing Date:</b> 17 May 1999 (17.05.99)  <b>(30) Priority Data:</b> PCT/US98/20491 30 September 1998 (30.09.98) US  <b>(71) Applicant (for all designated States except US):</b> THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US).  <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> BUSCH, Alfred [DE/BE]; Handelsstraat 210, B-1840 Londerzeel (BE). SMETS, Johan [BE/BE]; Bollenberg 79, B-3210 Lubbeek (BE). BAECK, Andre, Cesar [BE/BE]; Putsesteenweg 273, B-2820 Bonheiden (BE).  <b>(74) Agents:</b> REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).		<b>(81) Designated States:</b> AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>
<b>(54) Title:</b> LAUNDRY DETERGENT AND/OR FABRIC CARE COMPOSITIONS COMPRISING A CHEMICAL ENTITY, WHICH CONTAINS A DEPOSITION AID, AND A POLYMER		
<b>(57) Abstract</b>  The present invention relates to laundry detergent and/or fabric care compositions comprising a chemical entity and a polymer; wherein the chemical entity comprises a deposition aid having a high affinity for cellulose and a benefit agent. These compositions provide improved fabric cleaning including stain/soil removal, anti-redeposition of soils and/or whiteness maintenance and improved fabric care including color care and/or fabric softness.		

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

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